

Certificate of Analysis

Sample Information

CTLA ID: 10089
 Date Received: 8/13/2019
 Sample Name: Kannaway Premium Hemp Oil 1500 mg 4 oz
 Lot Number: KW19719
 Customer: MM Inc.

Analysis	Method	MDL Specification	Result	Units
Rapid Complete Micro				
Total Plate Count	USP <2021>	100 Report	<100	cfu/g
Total Coliforms	BAM CH.4	10 Report	<10	cfu/g
<i>Escherichia coli</i>	USP <2022>	Report	Negative	
<i>Salmonella</i>	USP <2022>	Report	Negative	
<i>Staphylococcus aureus</i>	USP <2022>	Report	Negative	
Rapid Yeast and Mold	AOAC 997.02	10 Report	<10	cfu/g
Heavy Metals				
Arsenic	USP <2232>	0.059 Report	<0.059	ppm
Cadmium	USP <2232>	0.059 Report	<0.059	ppm
Lead	USP <2232>	0.059 Report	<0.059	ppm
Mercury	USP <2232>	0.059 Report	<0.059	ppm
Cannabinoid Concentration				
Total Cannabidiol (CBD)	HPLC	6.977 Report	1,556.290	mg/4 oz
Total Tetrahydrocannabinol (THC)	HPLC	0.006 Report	0.009	%
CBD	HPLC	6.977 Report	1,249.606	mg/4 oz
CBDA	HPLC	6.977 Report	349.697	mg/4 oz
Δ9-THC	HPLC	6.977 Report	9.888	mg/4 oz
THCA	HPLC	6.977 Report	ND	mg/4 oz
Δ8-THC	HPLC	6.977 Report	ND	mg/4 oz
THCV	HPLC	6.977 Report	ND	mg/4 oz
CBDV	HPLC	6.977 Report	ND	mg/4 oz
CBDVA	HPLC	6.977 Report	ND	mg/4 oz
CBGA	HPLC	6.977 Report	ND	mg/4 oz

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Quality Manager

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CBG	HPLC	6.977 Report	ND	mg/4 oz
CBN	HPLC	6.977 Report	ND	mg/4 oz
CBC	HPLC	6.977 Report	22.470	mg/4 oz
CBL	HPLC	6.977 Report	ND	mg/4 oz
Pesticides				
Abamectin	USP <561>	.01 Report	ND	ppm
Acequinocyl	USP <561>	.01 Report	ND	ppm
Bifenazate	USP <561>	.01 Report	ND	ppm
Bifenthrin	USP <561>	.01 Report	ND	ppm
Cyfluthrin	USP <561>	.01 Report	ND	ppm
Cypermethrin	USP <561>	.01 Report	ND	ppm
Daminozide	USP <561>	.01 Report	ND	ppm
Dimethomorph	USP <561>	.01 Report	ND	ppm
Etoxazole	USP <561>	.01 Report	ND	ppm
Fenhexamid	USP <561>	.01 Report	ND	ppm
Flonicamid	USP <561>	.01 Report	ND	ppm
Fludioxonil	USP <561>	.01 Report	ND	ppm
Imidacloprid	USP <561>	.01 Report	ND	ppm
Myclobutanil	USP <561>	.01 Report	ND	ppm
Paclobutrazol	USP <561>	.01 Report	ND	ppm
Piperonyl Butoxide	USP <561>	.01 Report	ND	ppm
Pyrethrins	USP <561>	.01 Report	ND	ppm
Quintozene	USP <561>	.01 Report	ND	ppm
Spinetoram	USP <561>	.01 Report	ND	ppm

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Spinosad	USP <561>	.01 Report	ND	ppm
Spirotetramat	USP <561>	.01 Report	ND	ppm
Thiamethoxam	USP <561>	.01 Report	ND	ppm
Trifloxystrobin	USP <561>	.01 Report	ND	ppm
Plant Growth Regulators	USP <561>	.01 Report	ND	ppm
Residual Solvents				
Butanes	USP <467>	53 Report	ND	ppm
Heptanes	USP <467>	53 Report	ND	ppm
Propanes	USP <467>	53 Report	ND	ppm
Terpenes				
α-Bisabolol	GC	0.014 Report	ND	%
α-Humulene	GC	0.014 Report	ND	%
α-Pinene	GC	0.014 Report	ND	%
α-Terpinene	GC	0.014 Report	ND	%
β-Caryophyllene	GC	0.014 Report	ND	%
β-Myrcene	GC	0.014 Report	ND	%
β-Pinene	GC	0.014 Report	ND	%
δ-3-Carene	GC	0.014 Report	ND	%
δ-Limonene	GC	0.014 Report	ND	%
Camphene	GC	0.014 Report	ND	%
Caryophyllene Oxide	GC	0.014 Report	ND	%
cis-Nerolidol	GC	0.009 Report	ND	%
cis-Ocimene	GC	0.009 Report	ND	%
Eucalyptol	GC	0.014 Report	ND	%

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Guaiol	GC	0.014 Report	ND	%
Isopulegol	GC	0.014 Report	ND	%
Linalool	GC	0.014 Report	ND	%
p-Cymene	GC	0.014 Report	ND	%
Terpinolene	GC	0.014 Report	ND	%
trans-Nerolidol	GC	0.005 Report	ND	%
trans-Ocimene	GC	0.005 Report	ND	%
γ-Terpinene	GC	0.014 Report	ND	%

ND = None Detected

Total CBD = CBD + (CBDA*0.877)

Total THC = Δ9-THC + Δ8-THC

4 oz = 113.398 g

Density = 0.946 g/ml

Total Cannabinoids = 1,644.525 mg/4 oz

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